ATTACHMENT III

LOUISIANA TECHNOLOGY INNOVATIONS FUND – FINAL REPORT

August 29, 2003

I DEPARTMENT/AGENCY

Division of Administration
Office of Electronic Services

II PROJECT TITLE

Louisiana e-Mall

III PROJECT LEADER

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IV DESCRIPTION OF THE PROJECT

The Office of Electronic Services contracted with IBM as the Internet E-Commerce Service Provider to provide turnkey services to allow state government to operate an electronic mall with varied storefronts operated and managed by individual Agencies. The e-Mall is accessible over the Internet through agency Web pages, the Louisiana Services Directory, and the *Info Louisiana* home page. The e-Mall makes the following services available to state agencies:

- Host Services and agency stores, including necessary E-Commerce hardware, software, and data communications.
- Tools to allow agencies to remotely configure and manage their individual stores.
- Consulting services support for Agencies in their implementations of storefronts to use custom forms and to interact with agency databases.
- Tools and support to facilitate Internet-based credit card processing and other electronic formats (i.e., e-checks) for interacting with the "State Bank" designated by the State's Treasurer's Office in accordance with state legislation and regulations.

Five agencies participated in the Initial Phase of this project that was focused on getting the basic e-Mall and the agency storefronts to an operational status. The initial agencies include Department of Transportation And Development (DOTD), Louisiana Department of Insurance (LDOI), Department of Economic Development (DED), Louisiana Real Estate Commission (LREC), and Division of Administration's Office of State Register (OSR). Once underway, the Office of Motor Vehicle OMV) joined the project adding four of their key online services. In addition, OMV added interactive voice response (IVR) as a channel for accessing services via the E-Mall.

Following are the key milestones accomplished during the project:

Proposals received from vendors	May 26, 2000
Proposal Evaluation Completed	August 17, 2000
Award Recommendation and Draft Contract Approved	September 8, 2000
Contract issued	October 5, 2000
Management Kickoff Meeting	October 16, 2000
Agency Requirements Determination	October 26 and 27, 2000
Core Requirements Baseline Approved	November 15, 2000
E-Mall Academy Launched	December 20, 2000
Begin Payment API development	March 1, 2001
Office of Motor Vehicles Application Initiated	March 14, 2001
Core E-Mall Delivered	March 28, 2001
OSR Storefront Delivered for Acceptance	March 28, 2001
DOTD Storefront Delivered for Acceptance	March 28, 2001
DED Storefront Delivered for Acceptance	April 10, 2001
LREC Storefront Delivered for Acceptance	April 10, 2001
Core E-Mall Operational	June 10, 2001
Local Tax Collection Implemented	June 15,2001
Storefronts for LREC, DOTD, OSR, & LDED Operational	June 10 – August 7, 2001
DOI Storefront Delivered for Acceptance	July 7, 2001
DOI Storefront Acceptance	September 2001
Initial OMV Applications Online	November 1, 2001
OMV Expresslane Applications Migrated to E-Mall	July 1, 2002

V POST IMPLEMENTATION REVIEW AND ASSESSMENT

a. Executive Summary of Findings

The Louisiana E-Mall has been in operation continuously since June 2001. It is currently processing over 120,000 transactions annually and during a recent month handled over 20,000 transactions. The transaction volume increases monthly and agencies are currently planning to implement new online services using the technologies and services piloted through the E-Mall.

The e-Mall project validated that the eCommerce and web technologies available are highly capable of delivering State Agency goods and services via the Internet in a cost effective, responsive manner. Without exception, the services that agencies offer through the e-Mall are highly regarded by the constituents and provide cost effective and efficient delivery methods for the agency. Where the application is for delivery of a product, such as a map, the e-Mall process typically reduces delivery timelines by half.

It was determined that eCommerce applications that rely heavily on agency resident legacy databases do not fit well with the totally outsourced model. A distributed architecture is most effective for these types applications where the eCommerce business logic is co-hosted with the legacy data and the common eCommerce services, such as payment and taxation, are accessed from the e-Mall as a web service. Based on this finding the e-Mall was structured to support a multi-level distributed architecture.

It was further demonstrated that straight-forward fee for service and fee for product applications that primarily use out-of-the-box capabilities provide the highest return-on-investment and lowest cost risk in E-Mall type models. Customizations contribute to unfavorable costs and reduce the flexibility to rapidly respond to requirements changes.

Out-of-the-box applications can be provided as a complete service with minor impact on other agency IT initiatives. This was well demonstrated by the Real Estate Commission and Economic Development applications.

A shared resource can be structured to allow individual agencies to completely control their delivery of services and to manage their financial accountability. This is a key and required feature of shared hosting of state eCommerce applications.

On-line electronic payment methods can be structured to be highly secure and to effectively protect the privacy and integrity of financial and personal data. This requires a risk assessment and careful analysis of the security architecture to be employed to contain risk at acceptable levels. Items such as credit card numbers also have statutorial mandates that must be supported by the security architecture.

On-line electronic payment methods offer significantly improved cash flow timelines over traditional over-the-counter and mail-in transaction processes.

b. Accomplishments and Best Practices Identified

All pilot applications met agency requirements and acceptance – all applications planned for the five core e-Mall pilot agencies were successfully developed and acceptance tested. Four of the five pilot agency applications were placed in operational status immediately upon successful acceptance testing. Unfortunately, the Department of Insurance (DOI) changed their business rules to the extent that the developed product was no longer consistent with their business process and implementation was deferred. DOI is currently working with OIS to utilize the Payment Gateway web services with eCommerce applications subsequently developed under their new business processes.

Reconciliation of online financial transactions – a comprehensive process was developed for reconciling the transactions for the goods and services provided with the financial information based on credit card processing. This process has the capability to support the various banking relationships employed by the using agencies.

Highly secure operation – the e-Mall architecture was structured to provide the highest level of security commercially available. No known security violations or data privacy or data integrity breaches have been detected since the system became operational. The lessons learned relative to security will be incorporated into statewide security policy and procedures for eCommerce.

Collection and remittance of state and local taxes – using the E-Mall, Louisiana became one of the first, if not the first state, to completely automate electronic collection and remittance of state and local taxes.

Distributed architecture based on web services permits agencies to integrate common services in their legacy applications – the E-Mall structure permits agencies to utilize either all of the E-Mall as a managed hosting environment or selected eCommerce services that can be integrated with legacy agency applications.

Expanded to support IVR - Interactive Voice response (IVR) was added by OMV as an input channel through which online renewals may be made. This is a highly used, convenient way to conduct transactions that require minimum user input.

Continual growth in transaction volumes – use of web services for common eCommerce processes, when carefully structured, provides a robust capability for implementing and growing eCommerce application.

c. Benefits Achieved/Expected

Makes state services available to constituents at their convenience 24 X 7 – the E-Mall is available to business and citizens to conduct transactions with state government around the clock, 7 days per week. This allows constituents to conduct business at a time that is convenient to them. More than 120,000 online transactions were conducted through the E-Mall in its first full year of operation.

High availability – the E-Mall architecture is configured for continuity of service. Except for a short period of scheduled weekly maintenance, constituents are assured that the E-Mall services will be available; the can depend on it. High availability has been demonstrated throughout the project.

Available from anyplace that has Internet access – A key benefit of Internet enabled services is that they can be conducted from anyplace that has Internet access. This permits constituents to choose a location that is most convenient to them to interact with the state. The design supports both low speed dial-up and high-speed Internet connectivity.

Support IVR interface – Interactive voice response was implemented as another input channel for constituents to conduct transactions. This interface was demonstrated to work very well for specific Office of Motor Vehicle transactions that do not require large amounts of user textual input from the telephone device.

Payment process accelerates availability of funds to the state – The end-to-end electronic credit card payment process being utilized results in funds deposits into agency accounts in 48 to 72 hours with negligible administrative error processing.

Fully integrates with individual agencies financial and banking process – The electronic funds transfer capabilities permit credit card processors to directly credit agency bank accounts for their credit card collections. The E-Mall provides a robust reporting system that provides reconciliation of E-Mall collections and operating costs with the agency financial systems.

Sharing common capabilities and facilities reduces cost to individual agencies – The OMV applications utilized the E-Mall Payment and Reporting services which they integrated with in-house online applications that utilize their legacy databases and business logic. This avoids implementation costs for the web services offered by the E-Mall and the associated operation and support costs.

d. Pitfalls Encountered

Added requirement to collect and remit local taxes added unexpected complexities and extended the date for initial launch of the E-Mall.

An agency re-engineering of their business process at the time their e-Mall application was completed delayed that agencies use of eCommerce capabilities to deliver citizen and business services online.

e. Recommendations to Agencies Planning to use this Technology

- Include all agency stakeholders early in the investigation and design process

- Carefully select the goods and services for electronic delivery based on the benefit (ROI) to constituents/government
- Integrate the eCommerce functionality with back-office/legacy processes as seamlessly as possible in order to improve rather than complicate the overall process
- Incorporate the common eCommerce web services available from OIT to reduce technical and security risk and to minimize overall cost.

VI FINAL COST VS. BUDGET

	Category	Budgeted	Actual	Surplus
A.	Equipment			
B.	Software			
C.	Telecommunications			
D.	Professional/Contract Services	$925,000	$923,592	$1,408
E.	Other Costs			
	Total Project Cost	**925,000**	**$923,592**	**$1,408**

VII ITEMIZED LIST OF PROJECT EXPENSES

Item	Vendor	Contract	Amount
e-Mall activation, hosting and operation	IBM Corp	OSP Solicitation 2125286 Order 3900519	923,592